

Investigation of changes in students' self-esteem by the experience of maternity nursing practicum and factors involved

Yasuko Tsukamoto¹, Akemi Masuda²

Key words : self-esteem, maternity nursing practicum, health habits, GHQ

Abstract

A clinical training is the most effective learning method for nursing students. Students have various learning experiences through communication with patients and families. These are positive experiences for students, but their minds and bodies are also strongly and negatively influenced. The purpose of this study was to develop changes in students' self-esteem and mental health conditions by the maternity nursing practicum. They were the following results.

1) Students were generally satisfied with the maternity nursing practicum, but no change was found in self-esteem before and after the practicum. Students with high self-esteem were more satisfied with the practicum than those with low self-esteem. 2) Mental health estimation items, "sleep disturbance," "social dysfunction," "suicide feeling and depressive tendency" and "anxiety and dysthymia," decreased after the practicum. The practicum favorably influenced students' mental health. 3) "Anxiety and dysthymia," "suicide feeling and depressive tendency" and "general illness tendencies" decreased after the practicum in students with high satisfaction levels with the practicum. 4) The experience of delivery observation positively influenced students' mental health. 5) In health habits, many students had a lack of sleep, and a high proportion of students belonged to the mentally unhealthy group compared to general

college and university students.

Introduction

A clinical training is the most effective learning method for nursing students. Students have various learning experiences through communication with patients and families. These are positive experiences for students, but their minds and bodies are also strongly and negatively influenced. Students have various learning experiences in a short period of the practicum and, at that time, the "self-image" of each student defines individual behavior and patterns of adaptation. It is said that when one's perception of oneself is "healthy self-image," one can face one's weak points and limitations without hesitation and one can value others as if valuing oneself without being too defensive¹⁾. Adolescence is said to be the period most sensitive to these self-esteem feelings²⁾, and daily habits and mental sanity have also been reported to be related to self-esteem³⁻⁶⁾. Nursing students' practicum experiences are always fluid due to various factors, and this is speculated to influence students' self-esteem. Furthermore, a report describing that the childbirth experience increases self-esteem⁸⁾ makes us predict that the practicum experience of delivery increases self-esteem feelings even in nursing students.

The purposes of this study were to measure nursing students' self-esteem and to explore how

¹ Niigata University of Health and Welfare
1398 Shimami Kitaku Niigata 950-3198, Japan

² University of Shizuoka Junior College

the practicum, and what other factors, influenced students' self-esteem through the analysis of their health habits, health conditions, and experiences through the practicum. In the previous survey, no change was found in the overall students' self-esteem before and after the practicum, but differences were found between groups. In addition, students' mental sanity changed favorably after the maternity nursing practicum, suggesting that the practicum content influenced students' mental sanity. This study surveys nursing students' self-esteem, mental health conditions and daily habits before and after the practicum and analyzes changes and what influences the changes.

I. The purpose of the study

The purpose of the study was to grasp changes in students' self-esteem and mental health conditions before and after the maternity nursing practicum and to analyze factors involved in self-esteem.

II. Research methods

Changes in students' self-esteem before and after the practicum were measured by the 10 item Self-Esteem Scale developed by Rosenberg, whose reliability and validity have been demonstrated and which is utilized in various

fields. Mental health conditions were measured by the Japanese version of the 30-item General Health Questionnaire (GHQ30) developed by D. Goldberg. Health habits were measured by 7 items of Breslow's health habits. Items of satisfaction levels were included in the survey after the practicum, and students assessed satisfaction levels with the experiences in the practicum and the practicum itself with scores ranging from 1 to 10. The survey method was a self-administered questionnaire survey.

1. Subjects: 57 third grade nursing students in the 3-year course in A junior college.
2. Survey items: basic attributes, health habits, self-esteem scale, general health questionnaire (GHQ30), satisfaction levels with a maternity nursing practicum and the experiences during the course.
3. Survey period: from May to December 2006.
4. Ethical considerations: Verbal and written explanations of the purpose and methods of the study, freedom of withdrawal from the study, anonymity, confidentiality and participation at one's own free will were given to students and the students were also promised that participation in the study would not affect their school results at all. Only students who agreed to participate were

Table 1 Daily Habits Before and After the practicum n=57

Items	Before practicum Sample (%)		After practicum Sample (%)	
	Yes	No	Yes	No
Sleeps at least 7 to 8 hours a day	15 (26.3)	42 (73.7)	13 (22.8)	44 (77.2)
Eats breakfast almost everyday	32 (56.1)	25 (43.9)	40 (70.2)	17 (29.8)
Rarely eats between meals	17 (29.8)	40 (70.2)	16 (28.1)	41 (71.9)
Has normal weight	41 (71.9)	16 (28.1)	40 (70.2)	17 (29.8)
Practice sports or exercise	6 (10.5)	51 (89.5)	5 (8.8)	52 (91.2)
Drinks moderately	57 (100.0)	0 (0.0)	56 (98.2)	1 (1.8)
Does not smoke	52 (91.2)	4 (7.0)	52 (91.2)	5 (8.8)

surveyed and their written consent was obtained.

- The analysis of the results: the data were aggregated using SPSS ver.13 J Base System and analyzed by cross tabulation, t-test, χ^2 test, and multiple regression.

III. Results

1. Attributes of subjects

Fifty-seven subjects (54 females and 3 males) answered the questionnaire. Their mean age was 21.26 years (SD 2.62), 49 subjects were 20 or 21 years old, 7 subjects were between 22 and 29 years old, 1 subject was 30 years old or older, and 1 subject was married.

Nineteen (33.3%) subjects lived with their families and 38 (36.7%) lived alone.

2. Health habits

Health habits were measured by items of Breslow's health habits.

The proportion of students who had 7 to 8 hours of sleep was 26.3% before the practicum and decreased to 22.8% after the practicum. The proportion of students who ate breakfast almost every day was 56.1% before the practicum and increased to 70.2% after the practicum. Only 6 (10.5%) students had an exercise habit.

Tests showed no significant difference in the changes in health habits before and just after the maternity nursing practicum.

3. Self-esteem

The 10 item Self-Esteem Scale developed by Rosenberg was scored ranging from 1 to 6. It is considered that the higher is the score, the higher

is self-esteem. The mean self-esteem score was 31.37 (SD = 8.00) before the practicum and 32.51 (SD = 7.92) after the practicum. Thus, there was an increasing tendency but no significant difference (Table 2).

4. Health conditions

Health conditions were surveyed by self-administration using the General Health Questionnaire (GHQ30). In this scale, the lower is the score, the higher is the health level. The mean score was 12.6 (SD = 6.5) before the maternity nursing practicum and significantly decreased to 9.6 (SD = 6.9) after the practicum, indicating a favorable change. When 6 subscale items constituting GHQ30 (a, general illness tendencies; b, somatic symptoms; c, sleep disturbance; d, social dysfunction; e, anxiety and dysthymia; and f, suicide feeling and depressive tendency) were analyzed, "sleep disturbance," "social dysfunction" and "suicide feeling and depressive tendency" decreased significantly after the practicum and "anxiety and dysthymia" showed a significant decreasing tendency (Table 3).

5. Experiences in the practicum

Table 4 shows the students' concrete experience contents and the number of students. 82.5% observed delivery. More than 90% of students experienced being in charge of puerperants, bathing and holding newborns.

6. Satisfaction levels with the practicum, self-esteem and mental health

Satisfaction levels with the practicum were

Table 2 Differences in the mean SE score before and after the practicum

	Period	Sample	Mean	Standard deviation	T- score	Degree of freedom	P
SE total	Before practicum	57	31.37	8.01	-.764	111	N.S
	After practicum	57	32.51	7.92			

(※) +P<.10 *P<.05 **P<.01

assessed with scores ranging from 1 to 10. The minimum and maximum scores were 2 and 10, respectively, with the mean being 8.21. Thus, the scores were generally high. Subjects with a score of 9 or more were classified as a high-satisfaction group (n = 22) and subjects with a score of 8 or less as a low-satisfaction group (n = 35), and factors affecting satisfaction levels were analyzed. The high-satisfaction group showed a significant

tendency of high self-esteem (Table 4). The relationships between subscale items of GHQ and satisfaction levels were tested and, as a result, “anxiety and dysthymia” and “suicide feeling and depressive tendency” were significantly low and “general illness tendencies” tended to be low in the high-satisfaction group (Table 5).

7. Practicum experiences, self-esteem and mental

Table 3 Examination of differences in the mean of GHQ subscale before and after practicum

Subscale	Period	Sample	Mean	Standard deviation	T-score	Degree of freedom	P
GHQ total	Before	56	12.59	6.51	2.352	111	*
	After	57	9.63	6.85			
General illness tendencies	Before	57	2.18	1.50	0.372	112	N.S.
	After	57	2.07	1.52			
Somatic symptoms	Before	57	1.93	1.36	1.158	110.26	N.S.
	After	57	1.61	1.54			
Sleep disturbance	Before	56	2.21	1.52	2.409	111	*
	After	57	1.53	1.51			
Social dysfunction	Before	57	1.88	1.66	2.013	118.95	*
	After	57	1.30	1.40			
Anxiety and dysthymia	Before	57	3.16	1.71	1.716	112	+
	After	57	2.58	1.89			
Suicidal feeling and depressive tendency	Before	57	1.14	1.51	2.413	102.69	*
	After	57	0.54	1.10			

(※)+ P<.10 *P<.05 **P<.01

Table 4 Experiences in the practicum

Items	Yes Sample (%)	No Sample (%)
Observing delivery	47 (82.5)	10 (17.5)
Being in charge of puerperants	52 (91.2)	5 (8.8)
Bathing	55 (96.5)	2 (3.5)
Holding newborns	55 (96.5)	2 (3.5)
Suckling	35 (61.4)	22 (38.6)

health

No relationships between practicum experiences and self-esteem could be found. However, in the relationships between practicum experiences and GHQ, “suicide feeling and depressive tendency” decreased significantly and “general illness tendencies” also showed a significant decreasing tendency after the practicum in students who experienced “delivery observation,” as shown in Table 6. Forty-seven students experienced delivery observation and 10 were unable to do so.

IV. Discussion

1. Health habits

Among their health habits, many students had insufficient hours of sleep. No difference was found before and after the maternity nursing practicum, suggesting that many students had a chronic lack of sleep. However, although no significant difference was found before and after

the practicum, 70% of students ate breakfast after the practicum. Thus, an improvement in students' attitude as far as trying to maintain their health habits was observed. On the other hand, 30% of students attended the practicum without eating breakfast, suggesting a health problem in students attending the practicum. It has been reported in a survey of college and university students that students with high self-esteem have desirable daily habits⁹⁾. However, no relationship was revealed between self-esteem and health habits in this survey of nursing students, as well as another survey performed last year. It is necessary to further investigate whether students have particular daily habits during the nursing practicum by comparing with general college and university students.

2. Self-esteem

It is said that if one recognizes a “healthy self-image,” one can face one’s weak points and

Table 5 Satisfaction levels and RSE, GHQ subscale and differences in the mean

Subscale		Sample	Mean	Standard deviation	T-score	Degree of freedom	P
RSE	High-satisfaction group	22	35.05	9.21	1.97	55	+
	Low-satisfaction group	35	30.91	6.65			
General illness tendencies	High-satisfaction group	22	1.59	1.62	-1.93	55	+
	Low-satisfaction group	35	2.37	1.40			
Somatic symptoms	High-satisfaction group	22	1.31	1.52	-1.15	55	N.S.
	Low-satisfaction group	35	1.80	1.55			
Sleep disturbance	High-satisfaction group	22	1.36	1.43	-.64	55	N.S.
	Low-satisfaction group	35	1.63	1.57			
Social dysfunction	High-satisfaction group	22	1.31	1.59	.08	55	N.S.
	Low-satisfaction group	35	1.29	1.30			
Anxiety and dysthymia	High-satisfaction group	22	1.95	1.94	-2.03	55	*
	Low-satisfaction group	35	2.97	1.77			
Suicidal feeling and depressive tendency	High-satisfaction group	22	0.18	.66	-2.03	53.69	*
	Low-satisfaction group	35	0.77	1.26			

※) + ... p < .10 *... p < .05

Table 6 Practicum experiences (Delivery Observation) and RSE, differences in subscale mean

Subscale		Sample	Mean	Standard deviation	T-score	Degree of freedom	P
RSE	Delivery observation	47	37.64	8.55	.42	29.43	N.S.
	No Delivery observation	10	31.90	4.01			
General illness tendencies	Delivery observation	47	2.23	1.54	1.80	55	+
	No Delivery observation	10	1.30	1.25			
Somatic symptoms	Delivery observation	47	1.70	1.57	.93	55	N.S.
	No Delivery observation	10	1.20	1.40			
Sleep disturbance	Delivery observation	47	1.62	1.50	.98	55	N.S.
	No Delivery observation	10	1.10	1.60			
Social dysfunction	Delivery observation	47	1.30	1.46	-.004	55	N.S.
	No Delivery observation	10	1.30	1.16			
Anxiety and dysthymia	Delivery observation	47	2.77	1.86	1.65	55	N.S.
	No Delivery observation	10	1.70	1.89			
Suicidal feeling and depressive tendency	Delivery observation	47	0.64	1.19	2.69	52.16	**
	No Delivery observation	10	0.10	.32			

※) + ... p < .10 *... p < .05

limitations without hesitation and one can value others as if valuing oneself without being too defensive²⁾. We considered that experiences related to parent-child relationships and life in the maternity nursing practicum would affect students' self-esteem. It is considered that the higher is the score, the higher is self-esteem. The score was higher after the practicum, but no significant difference was found. There is a possibility that students have negative experiences as well as positive experiences in the practicum, and it is necessary to analyze through individual student cases and to analyze not only practicum experiences but also longitudinal changes in self-esteem.

3. Health conditions

In the GHQ30 that indicates mental health conditions, Watanabe¹⁰⁾ defined a score of 8 or more as an unhealthy group, quoting Kitamura¹¹⁾. In this survey, 75.0% of students had a score of 8

or more before the practicum and 52.6% belonged to the unhealthy group even after the practicum. On the other hand, 50.7% of college and university students were mentally unhealthy with a score of 8 or more in a survey by Watanabe¹²⁾, and in surveys targeting national university students by Nakagawa¹³⁾ and by Fukunishi *et al.*¹⁴⁾, 41.7% and 48%, respectively, were judged mentally unhealthy. Compared to these previous studies, the mental sanity of nursing students is low, suggesting that various relationships with patients, instructors, teachers and friends and environments affect students' mental sanity in the field of clinical practicum. Nakagawa has pointed out that "university students are a reserve army of neurosis with symptoms of anxiety, lethargy and depression" based on the results of the GHQ survey, and it can be said that the results of this survey indicate a further warning to nursing students.

However, students' mental sanity changed

favorably in the comparison before and after the practicum. Particularly, “sleep disturbance,” “social dysfunction,” “suicide feeling and depressive tendency” and “anxiety and dysthymia” decreased after the maternity nursing practicum, indicating that the practicum favorably influenced students’ mental health conditions.

Furthermore, the investigation of experience content revealed that “suicide feeling and depressive tendency” and “general illness tendencies” decreased in students who experienced “delivery observation,” indicating that delivery observation influenced students’ mental health. There is also a report that the way to perceive the childbirth experience influences self-esteem feelings¹⁵⁾, and we would like to promote the analysis also in the future. Delivery observation is a valuable study opportunity of nursing, but further studies are also possible, such as making students look back on their own birth, considering parent-child relationships and wondering the meaning of birth of life. It has become difficult to observe delivery because of the influence of declining birth rates and changes in medical practice, but based on these results we would like to continuously develop practicum instruction in the future.

4. Satisfaction levels with the practicum

Since the maternity nursing practicum has to be conducted within a limited period of time, students feel tense and their practicum experiences have various limitations. However, students’ satisfaction levels with the maternity nursing practicum were high and many students were satisfied with the practicum. Even students who were not able to experience delivery observation and bathing newborns had high levels of satisfaction. Since the subscale items of GHQ30, “anxiety and dysthymia,” “suicide feeling and depressive tendency” and “general illness tendencies,” were low in the high-satisfaction group, it could be said that their

mental health was also good. We would like to further promote the analysis of relationships among the satisfaction levels with the practicum, self-esteem and practicum experience content.

Conclusion

1. Students were generally satisfied with the maternity nursing practicum, but no change was found in self-esteem before and after the practicum. Students with high self-esteem were more satisfied with the practicum than those with low self-esteem.
2. Mental health estimation items, “sleep disturbance,” “social dysfunction,” “suicide feeling and depressive tendency” and “anxiety and dysthymia,” decreased after the practicum. We suppose the practicum favorably influenced students’ mental health.
3. “Anxiety and dysthymia,” “suicide feeling and depressive tendency” and “general illness tendencies” decreased after the practicum in students with high satisfaction levels with the practicum.
4. The experience of delivery observation positively influenced students’ mental health.
5. In health habits, many students had a lack of sleep, and a high proportion of students belonged to the mentally unhealthy group compared to general college and university students.

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